

# CONTENTS

**IBM 1014**

DATE	CHANGE NO	DATE	CHANGE NO
	115180B		
2-25-63	115210		
3-26-63	115211		

INTERNATIONAL BUSINESS MACHINES CORP					
NAME	WIRING DIAGRAM- 1014 REMOTE INQUIRY UNIT				
DESIGN	AJR	II-5-62	TYPE	1014	
DETAIL	AJR	II-5-62	SCALE	NONE	
CHECK	J.P.B.	II-15-62	DRAW	VE	II-8-62
APPRO	ZnA	II-15-62	CHECK		

DATE	CHANGE NO.
11-7-62	115108
2-25-63	115210
3-26-63	115211

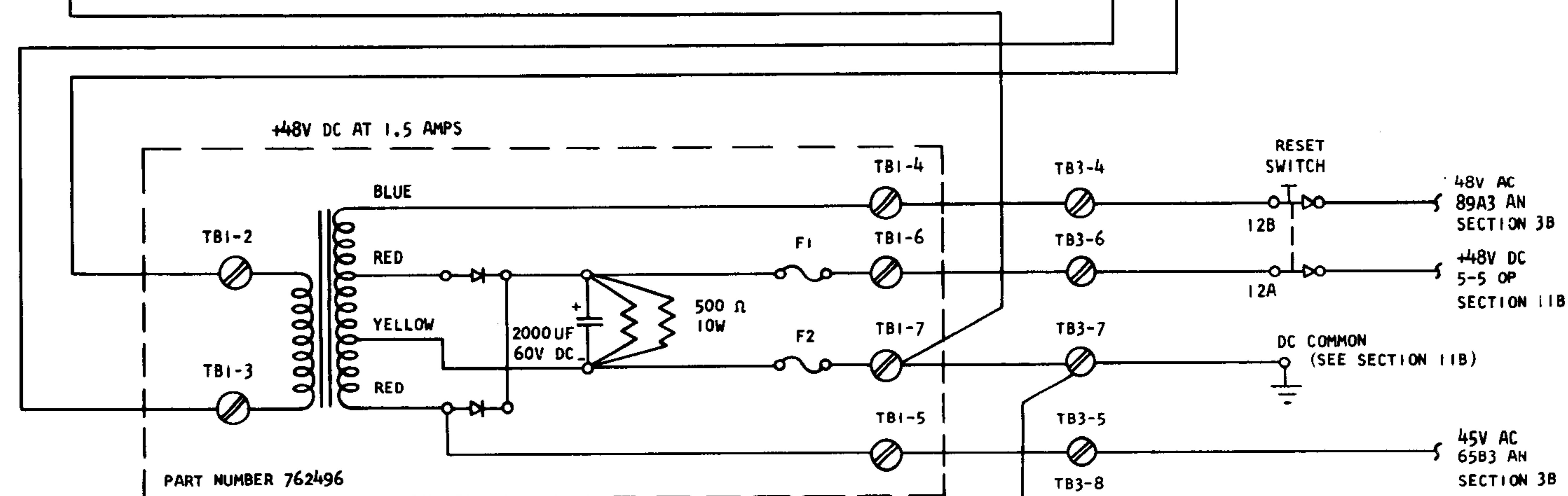
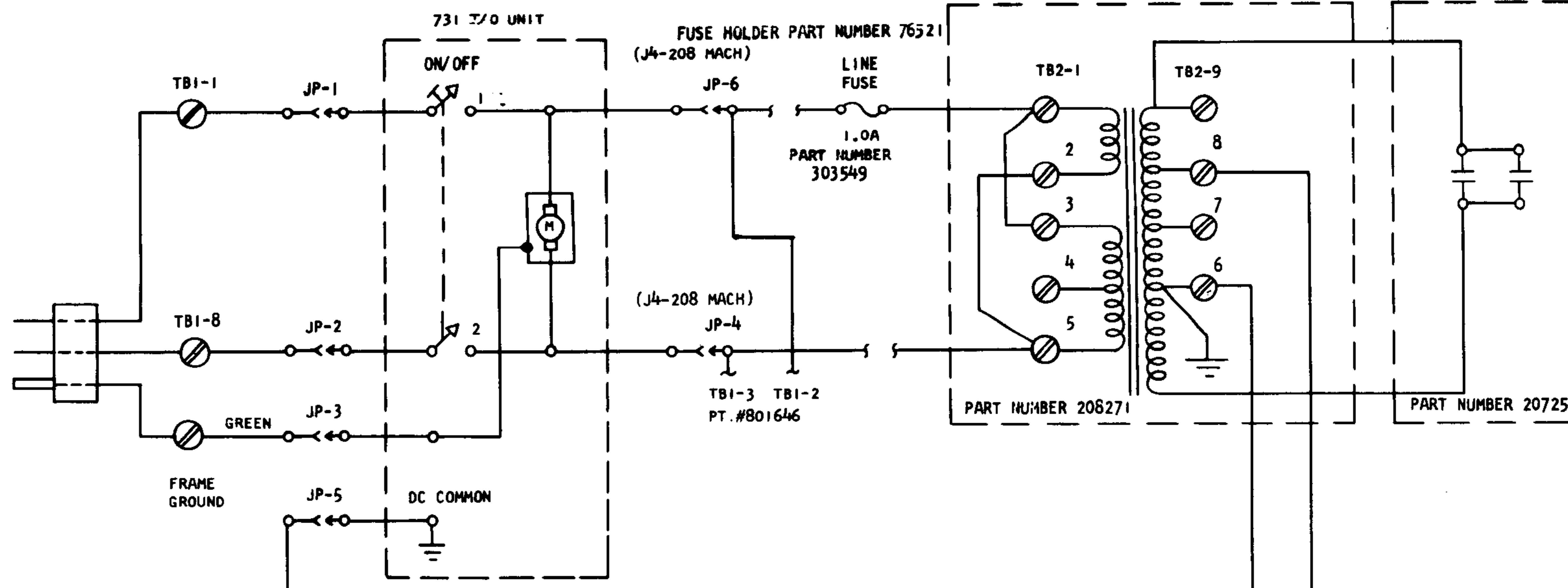
## 1014 POWER SUPPLY

TERMINAL BLOCK LOCATIONS:  
 TB1 - POWER SUPPLY  
 TB2 - FERRO RESONANT REGULATOR  
 TB3 - RELAY GATE

FERO RESONANT VOLTAGE REGULATOR OR SUPPLY

INPUT VOLTAGE	JUMPER	LINE CONNECTIONS
115	1 TO 3, 2 TO 5	1,5
208	2 TO 3	1,4
230	2 TO 3	1,5

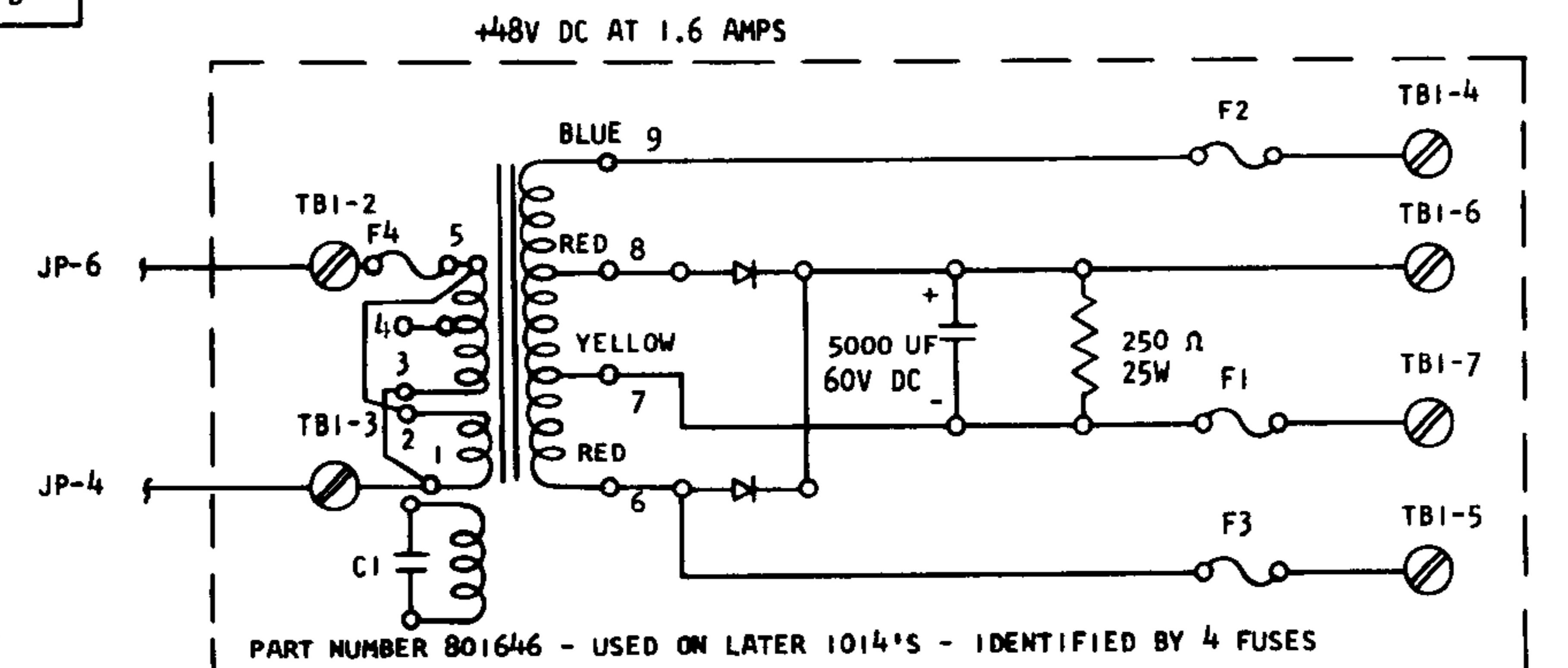
A



## 1014 TO WALL LINE CONNECTIONS

1014 CONN	LINE NAME	COLOR	WALL CONN
A	DATA COMMON	ORANGE	A
D	DATA	RED	B
B	SYNC COMMON	BLACK	C
E	SYNC	YELLOW	D

FUSES			
NAME	VOLTS	AMPS	PART NO.
F1 & F2	+48V DC	1.6	244302



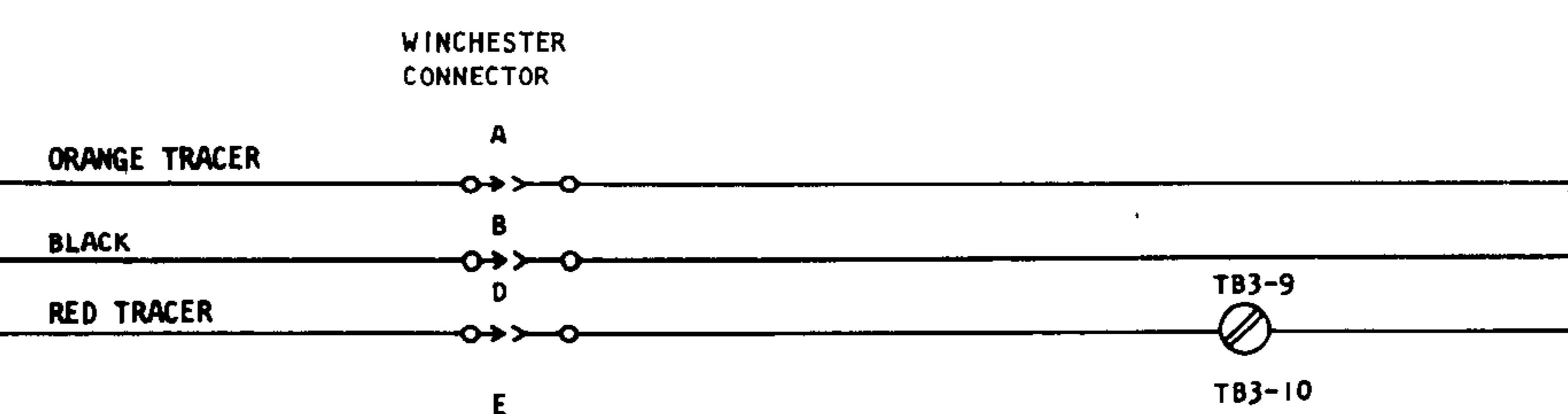
B

WALL MOUNTED TERMINAL BLOCK OR BOX CONNECTIONS

NOTE X

DATA COMMON DATA SYNC COMMON SYNC

FUSES			
NAME	VOLTS	AMPS	PART NO.
F1	+48V DC	1.6	78951
F2, F3	48V AC	.75	111264
F4	115 V AC	1.6	78951
F4	208-230V AC	.8	78952




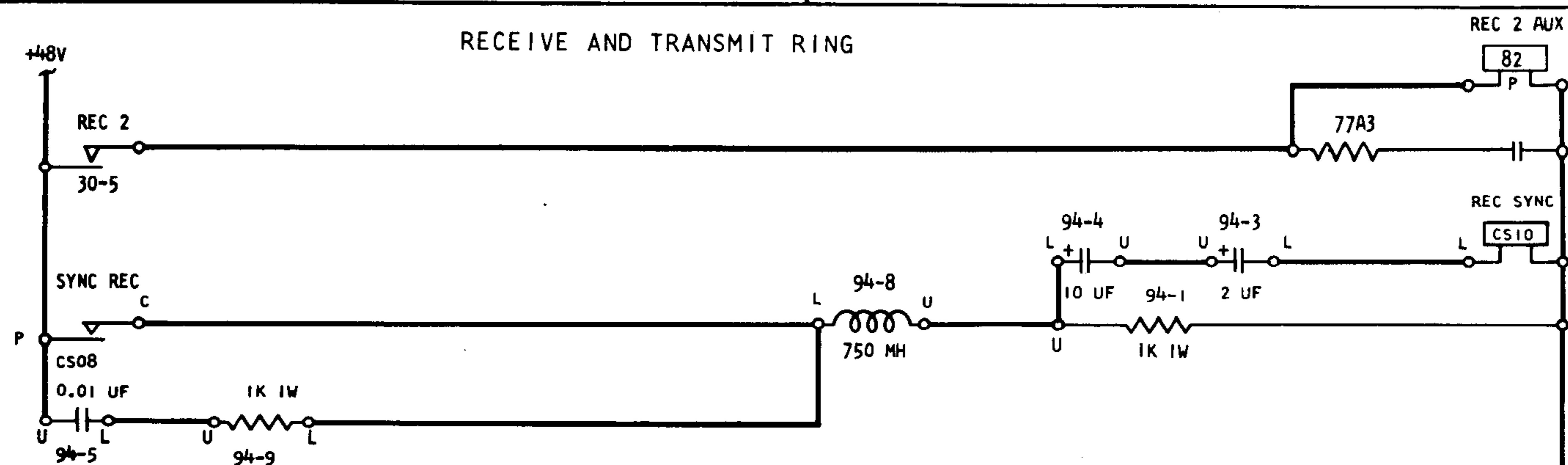
NOTE X A WALL MOUNTED TERMINAL BLOCK IS USED FOR A REMOTE 1014 INSTALLATION  
 A WALL MOUNTED BOX IS USED FOR A LOCAL 1014 INSTALLATION

DATA LINE 25-1 OP SECTION 3A  
 SYNC LINE 25-2 N/C SECTION 3B


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## 731 BCD TRANSLATOR






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65B4 CA  
SECTION 3B

## DATA REGISTER


DATE	CHANGE NO.
11-7-62	1151000
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731994

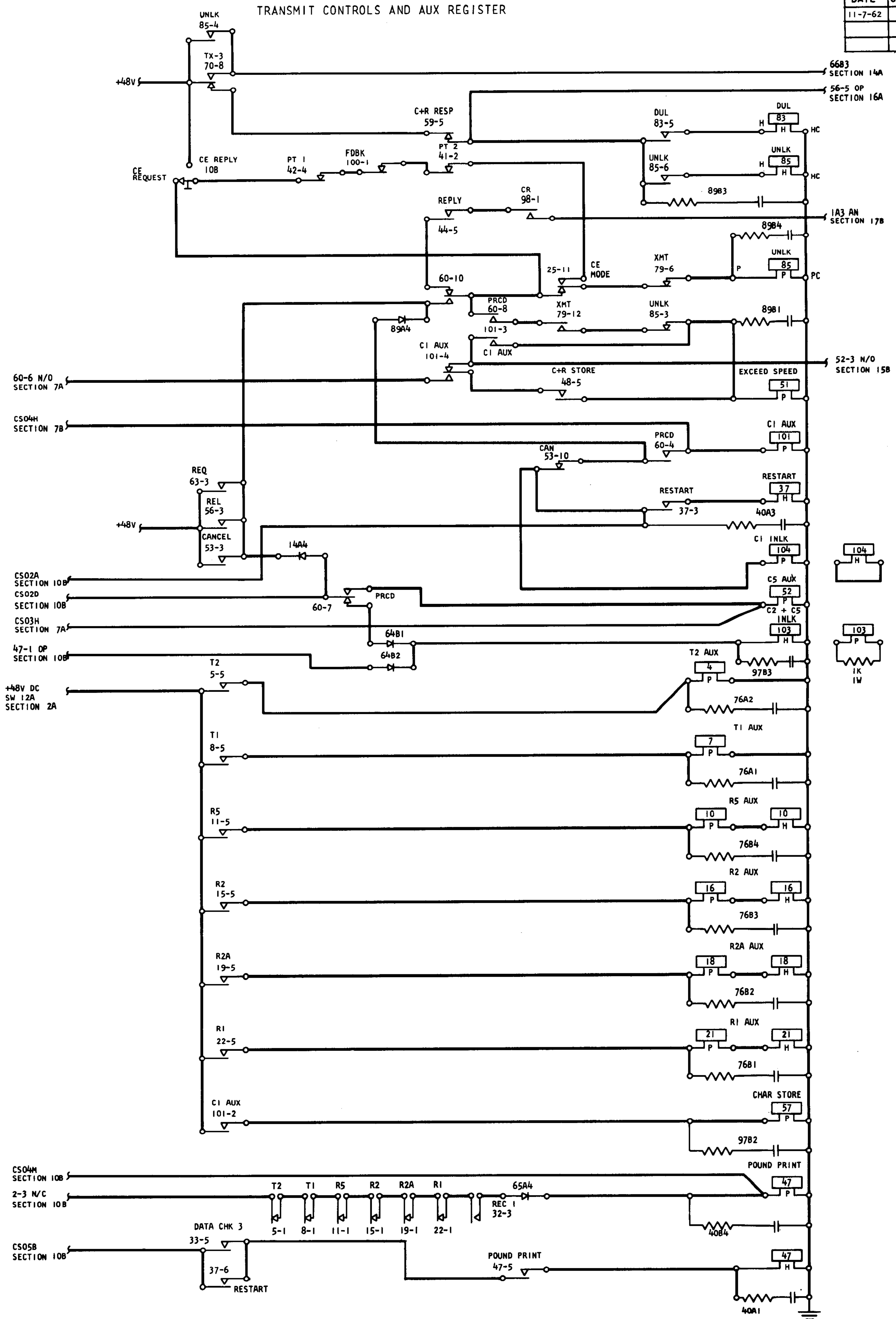
## DATA CHK AND FUNCTIONAL INLK

DATE	CHANGE NO.
11-7-62	1151808




## TRANSMIT CONTROLS AND AUX REGISTER

DATE	CHANGE NO.
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
DATE	CHANGE NO.
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731997


DATE	CHANGE NO.
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## REQUEST CONTROLS




731 MAGNETS  
DECODE NETWORK

DATE	CHANGE NO.
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2-25-63	115210



DATE	CHANGE NO.
11-7-62	115180B

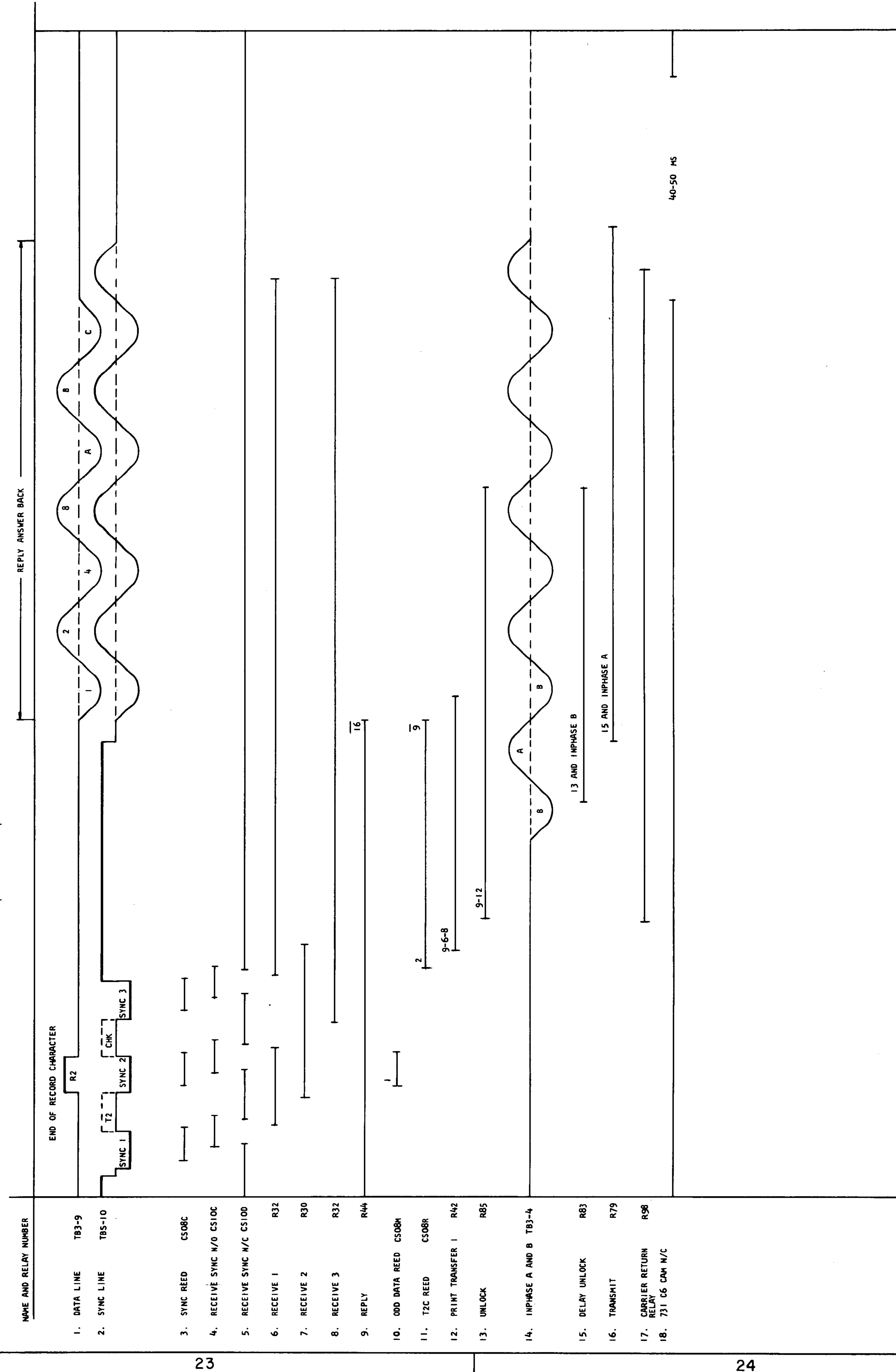
## TIMING CHART






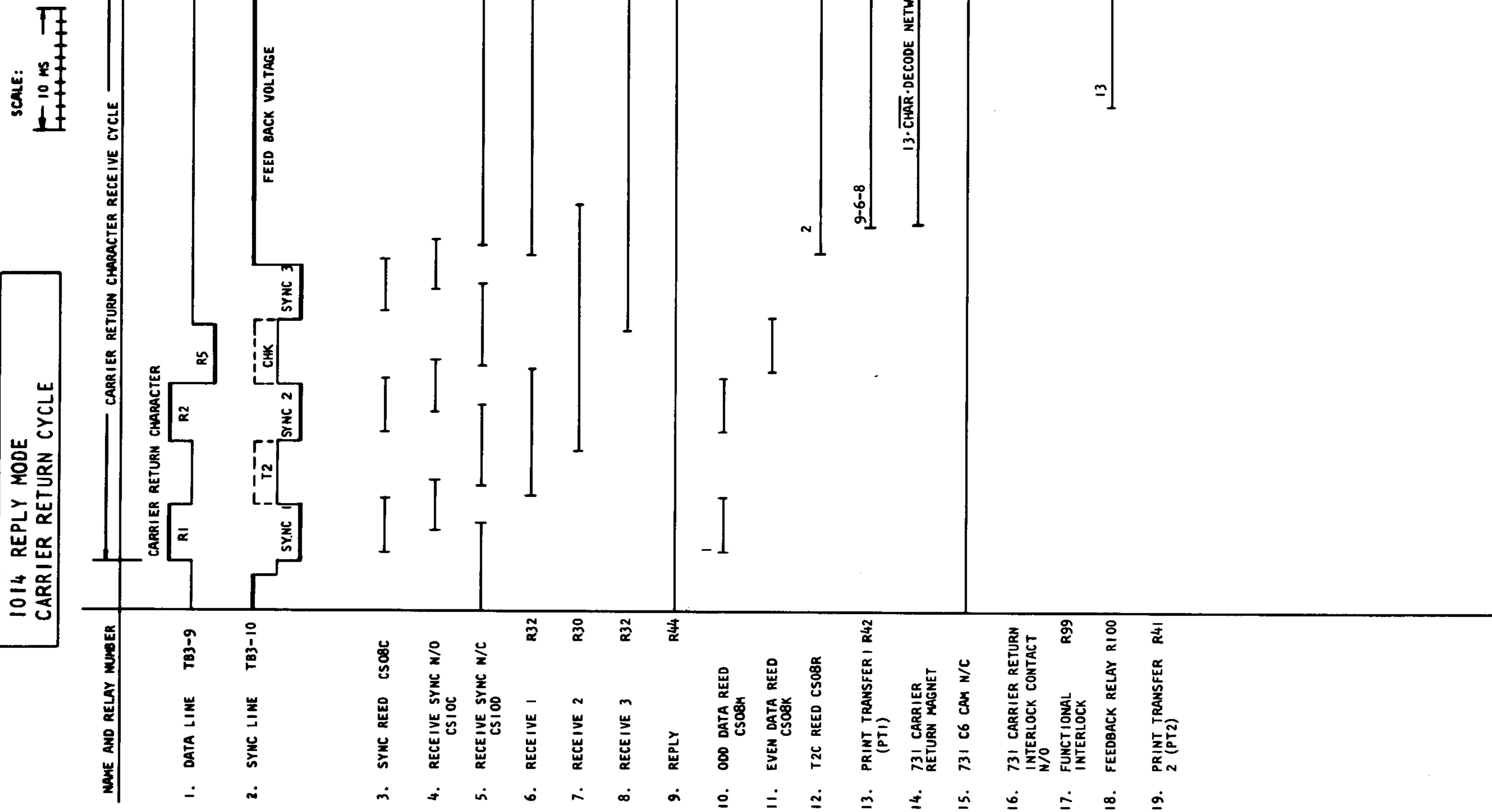
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1014 REPLY MODE  
END OF RECORD CYCLE



DATE	CHANGE NO.
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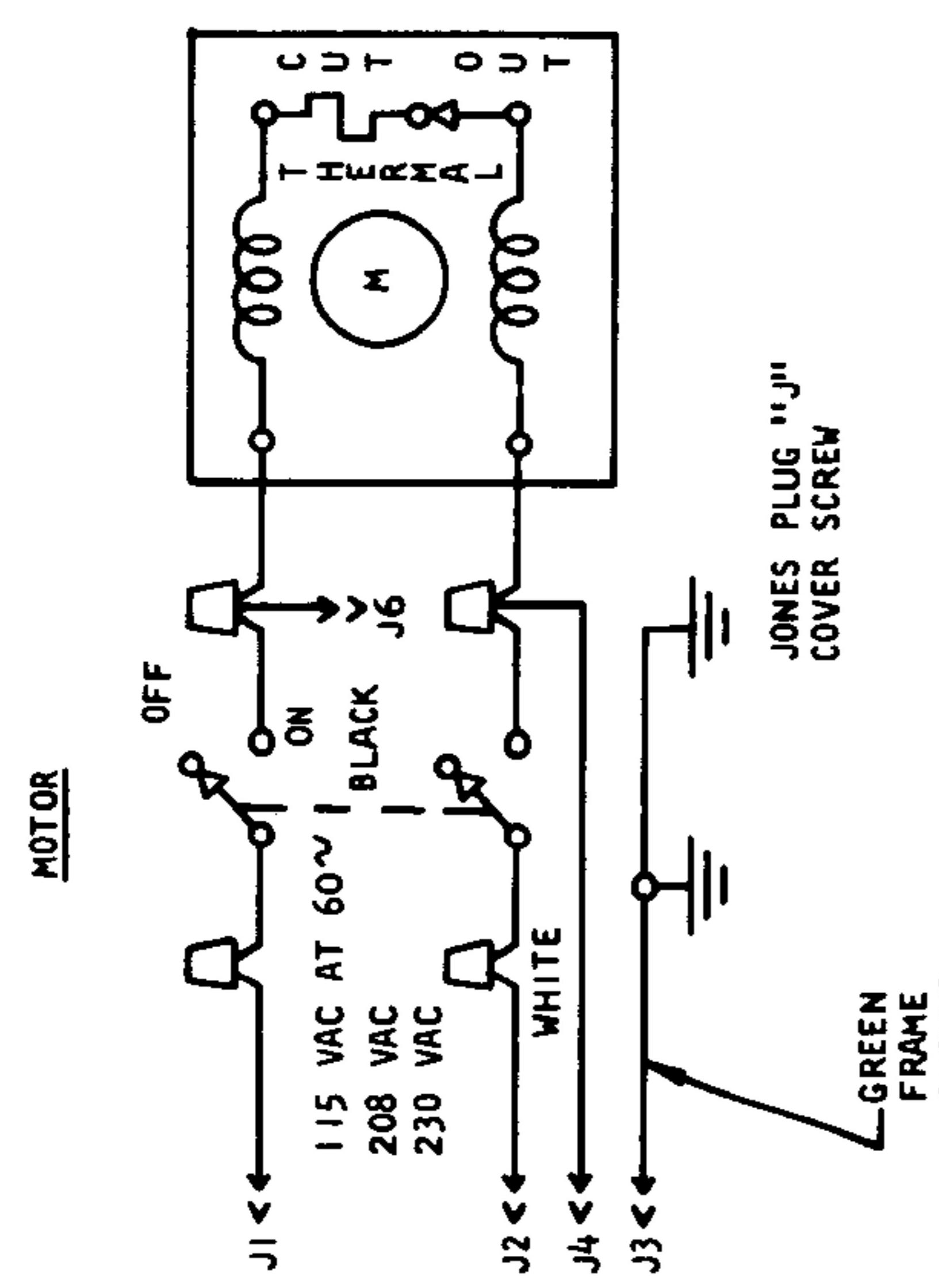
## TIMING CHART



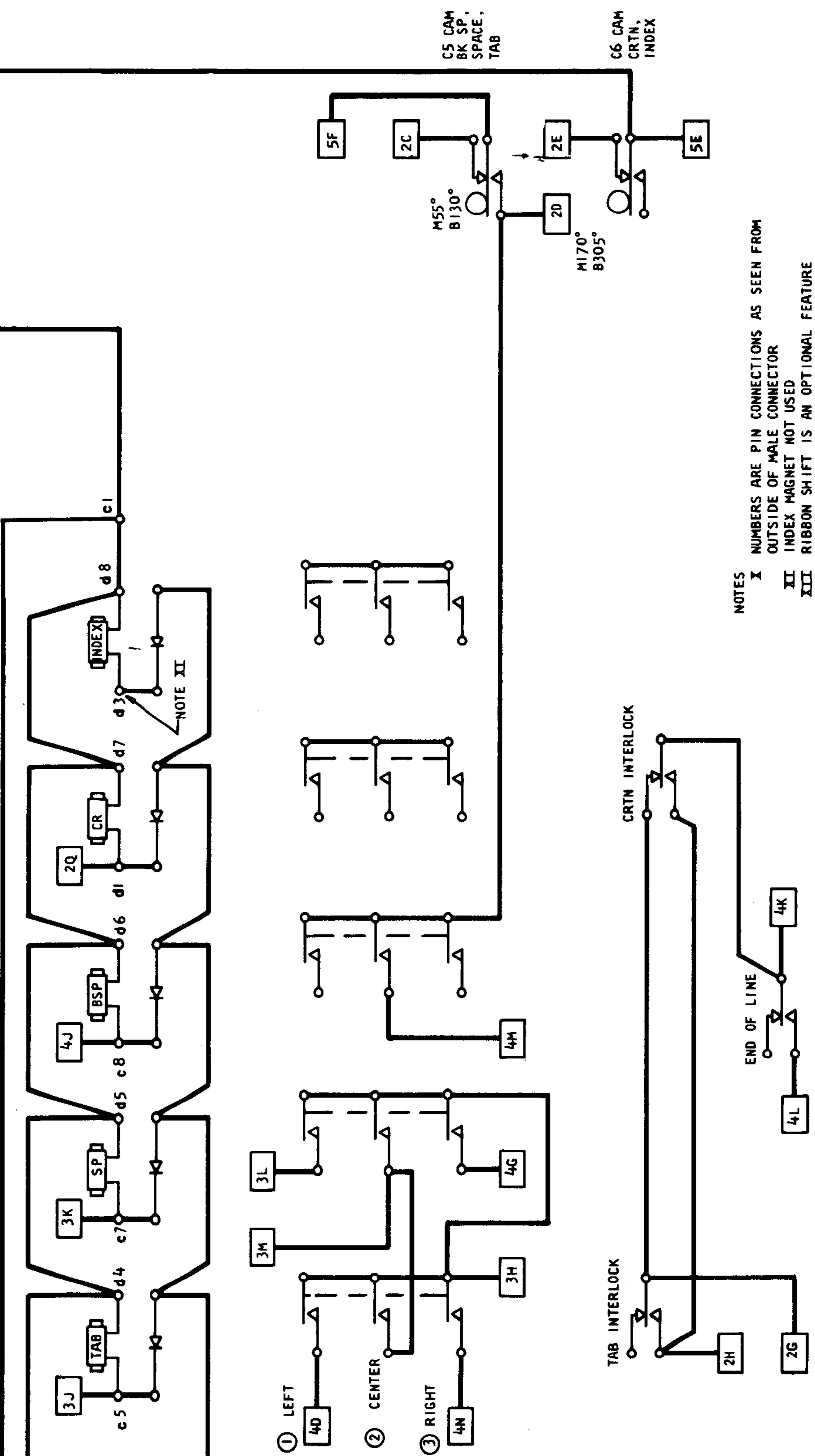
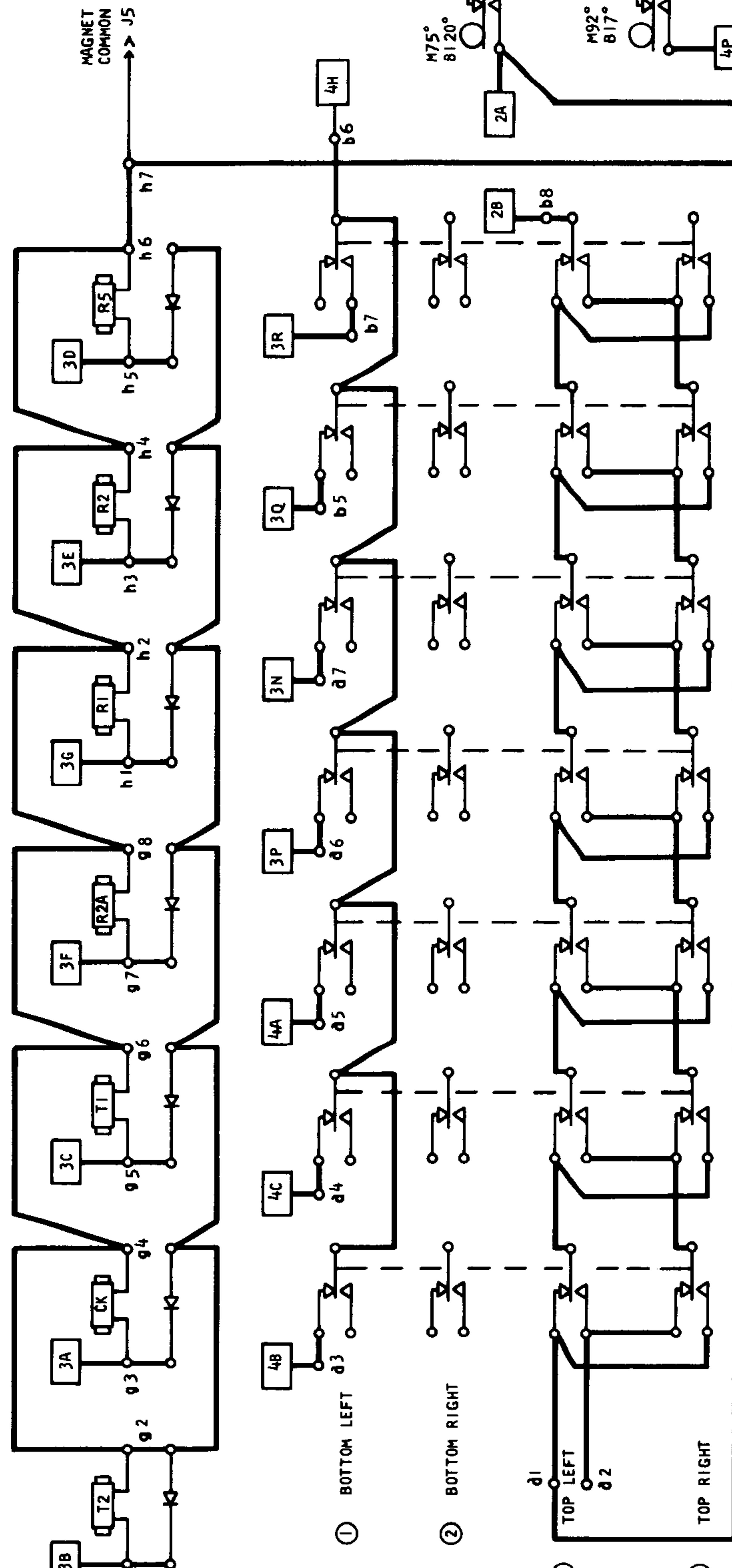
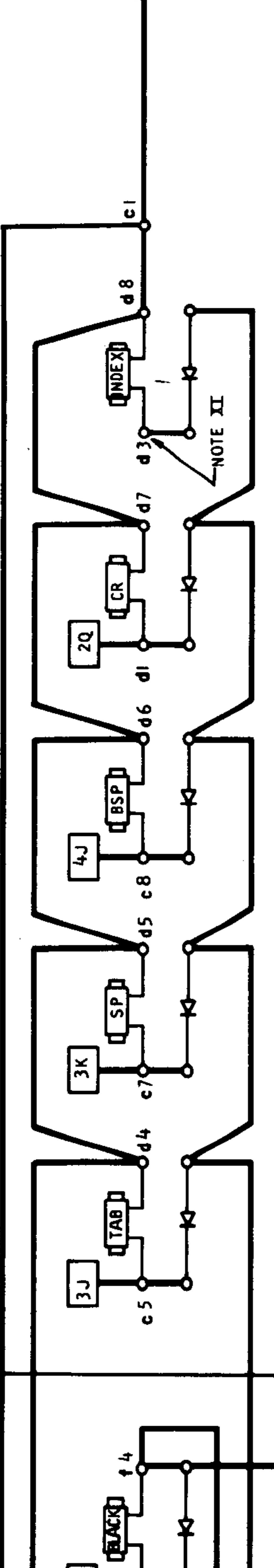
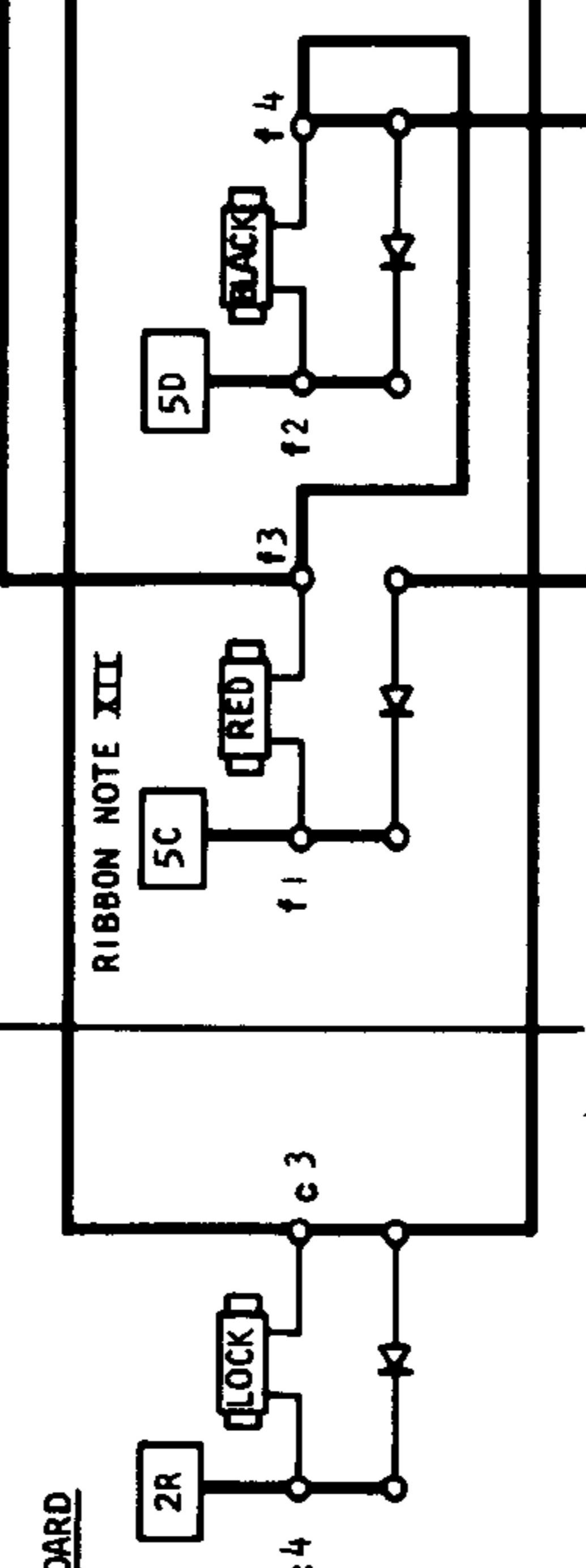
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## 731 WIRING DIAGRAM

PRINT SELECTION



## KEYBOARD



NOTES

I NUMBERS ARE PIN CONNECTIONS AS SEEN FROM OUTSIDE OF MALE CONNECTOR

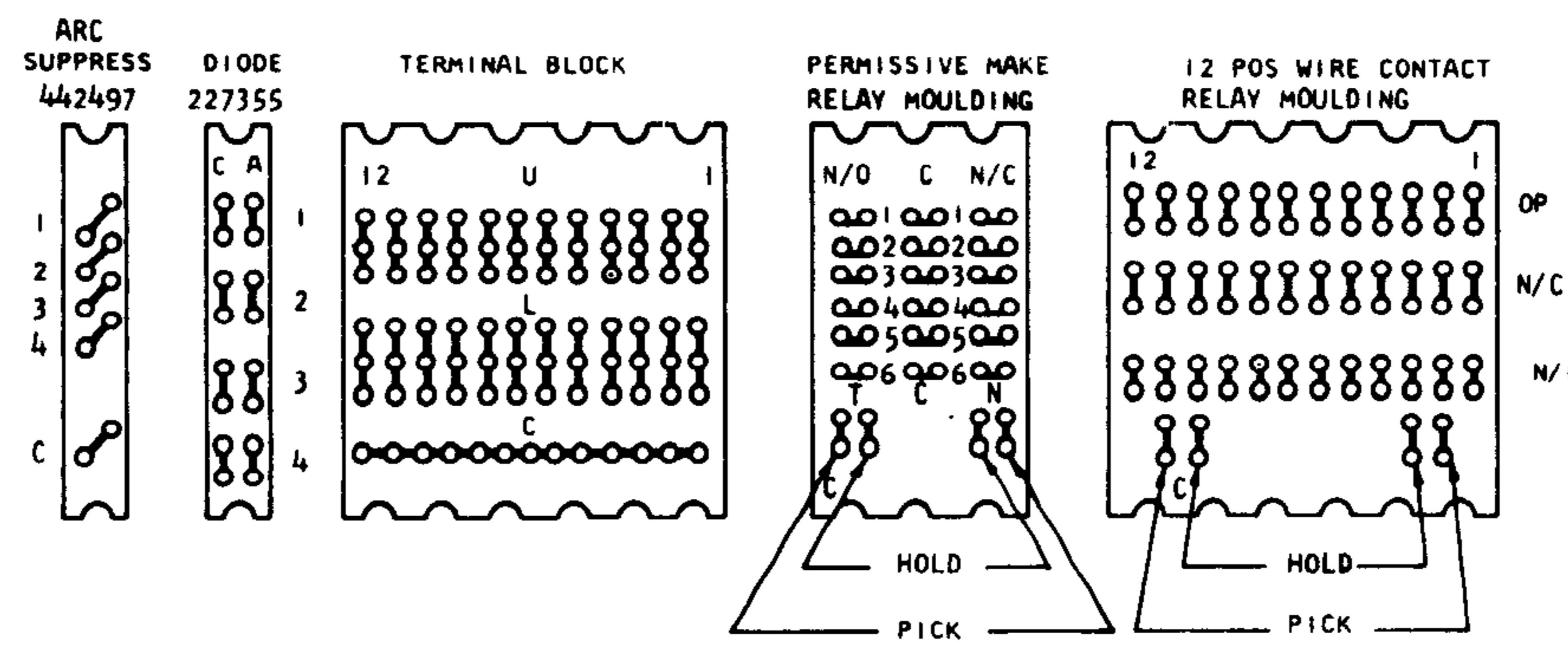
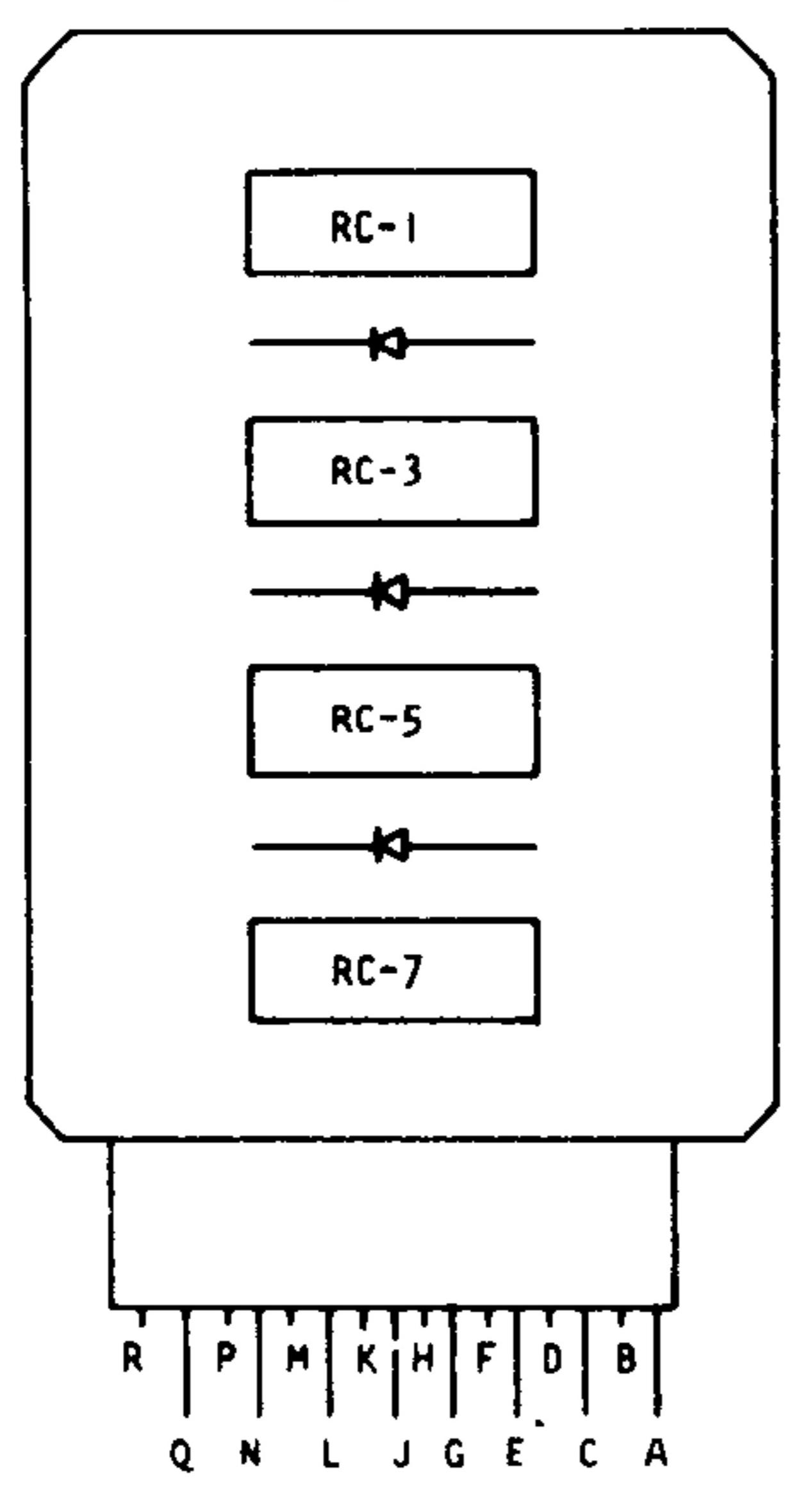
II INDEX MAGNET NOT USED

III RIBBON SHIFT IS AN OPTIONAL FEATURE

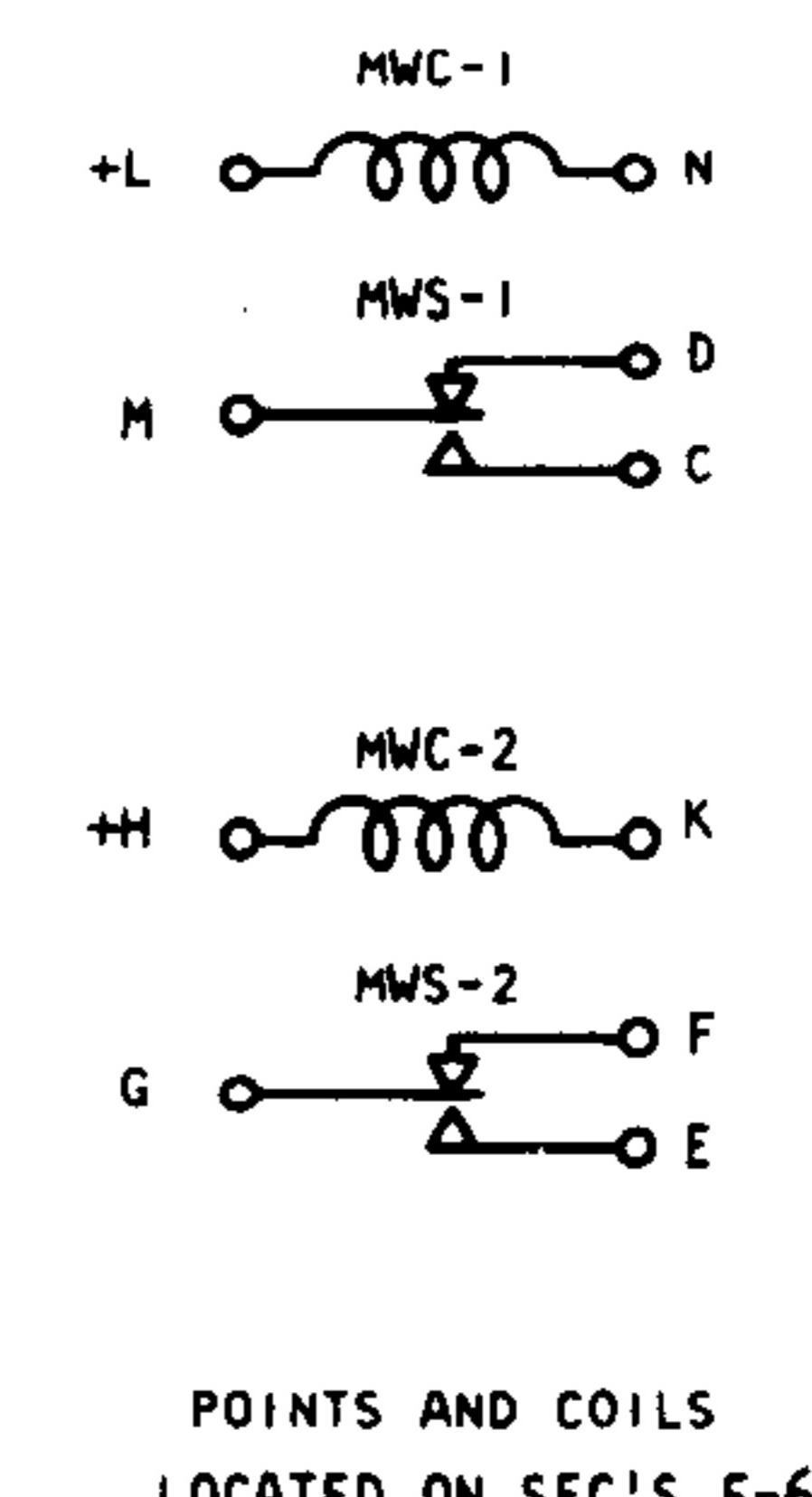
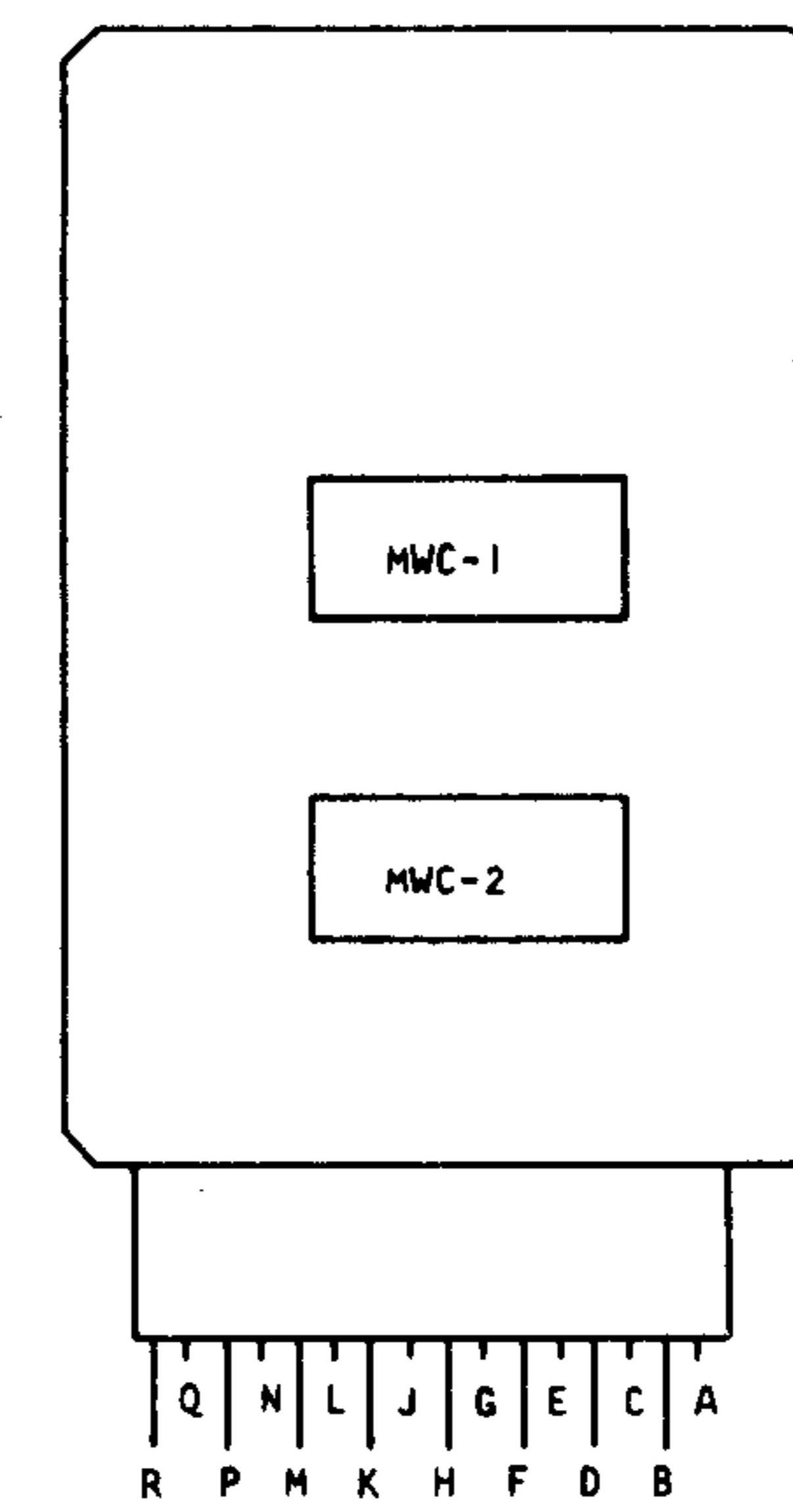
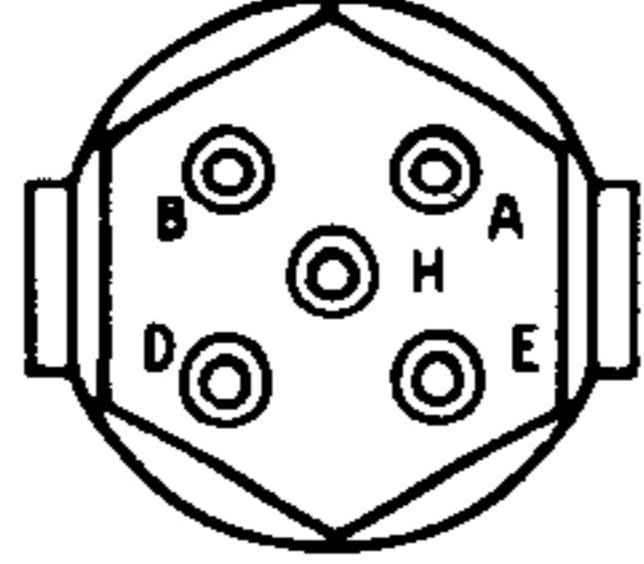
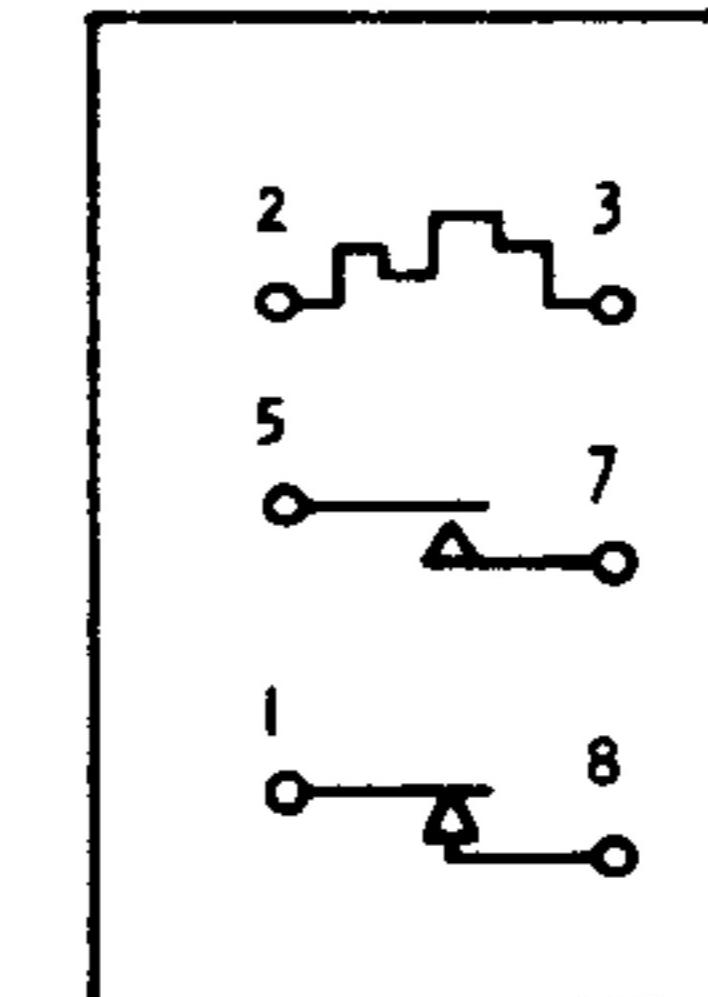
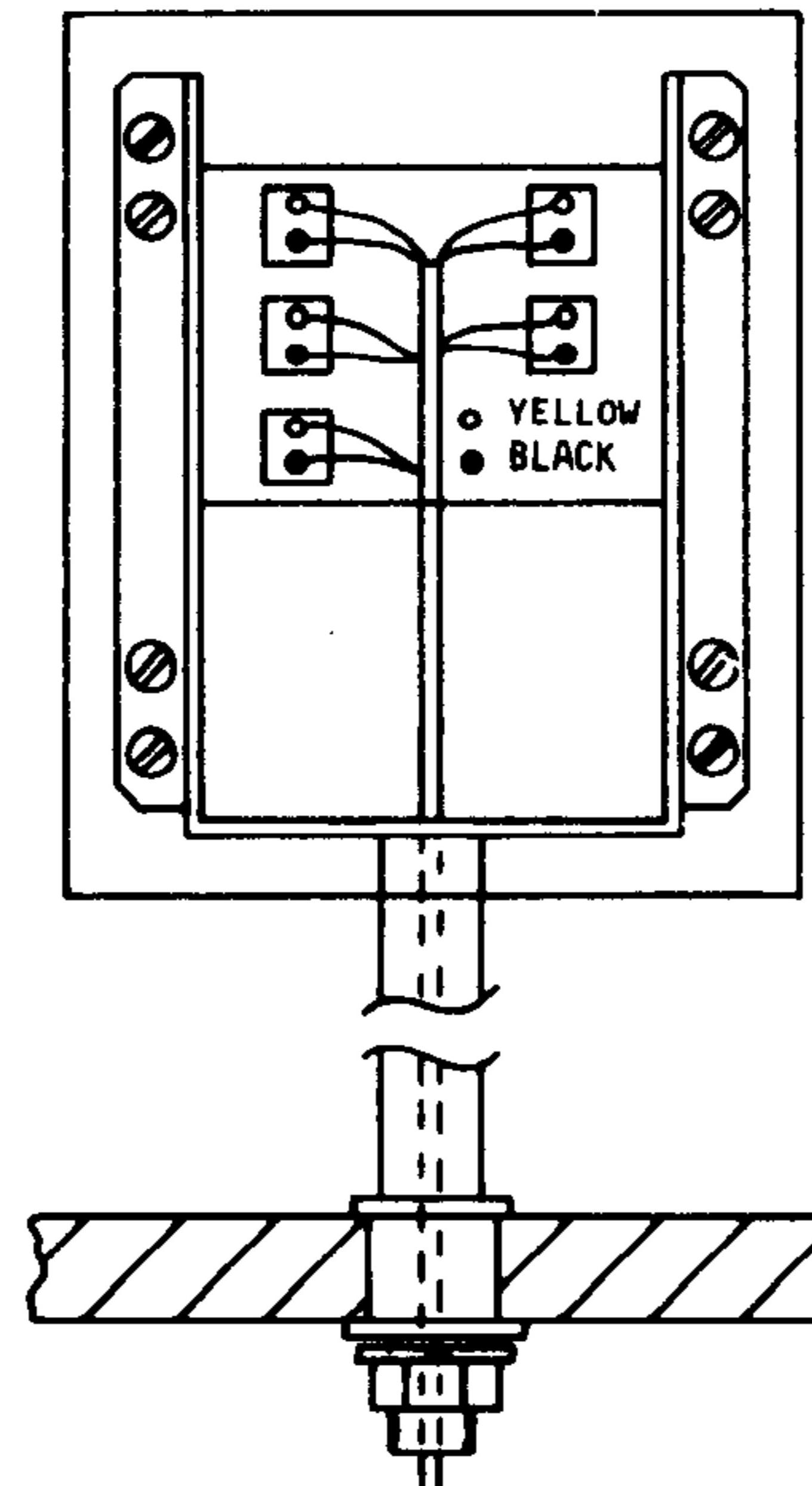
$\frac{1}{6}$   $\frac{3}{4}$   $\frac{1}{2}$   
JONES PLUG J  
321000 NOTE XII

COMPONENT PLUGGING LOCATIONS  
(WIRING SIDE VIEWS)

DATE	CHANGE NO.
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CS 08  
INQ REED SWITCH  
370521

REED SWITCH LOCATIONS				
NAME	COIL	LOC	POINT	LOC
T2C	RC-1	4B	RS-1	8A
SYNC REC	RC-3	4B	RS-3	5A
ODD	RC-5	4A	RS-5	7A
EVEN	RC-7	4A	RS-7	7A

CS 10  
MERCURY WETTED RELAY  
372295JONES PLUG  
FEMALEALL PINS LOCATED  
ON SEC 1AWINCHESTER  
CONNECTORALL PINS LOCATED  
ON SEC 1BDISPLAY HOUSING LIGHT PANEL WIRING  
WIRING SIDE

TIME DELAY RELAY  
NOTE: N/C CONTACTS (1-8)  
OPEN BEFORE THE N/O  
CONTACTS (5-7) CLOSE.

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## RELAY POINT LOCATION CHART

RELAY NO	COILS			CONTACT POINTS												NAME	SIZE	TYPE CODE	
	PU 1	PU 2	H	I	2	3	4	5	6	7	8	9	10	11	12				
1A				18B	18A	17B	5B									SEL DIODE	2	D	
1B				18B	18A	17A	18A									SEL DIODE	2	D	
2	8A	14A	13A	17B	10B	18A	4A	14A								CHECK	6	A	
2A				17A	17A	17A	18B									SEL DIODE	2	D	
4	12B			13A	13A	17B	18B	4A								T2 AUXILIARY	6	F	
5	8A			14A	11B	14B	10B	18A	11B	14A						T2	6	A	
7	12B			13A	13A	17B	17B	17B	4A						T1 AUXILIARY	6	F		
8	8A			14A	11B	14B	10B	18A	11B	14A					T1	6	A		
10	12B			12B	13A	13A	17B	17B	3A						R5 AUXILIARY	6	F		
11	8A			14A	11B	14B	10B	18A	11B	14A					R5	6	A		
13A					8A	8A									ARC SUPPRESS	2	E		
13B					8A	8A	8A	8A							SEL DIODE	2	D		
14A					8B	8B	8B	11A							SEL DIODE	2	D		
14B					8B	8B	8B	14A							ARC SUPPRESS	2	E		
15	8B			14A	11B	13B	9B	18A	11B	14A					R2	6	A		
16	12B			12B	14A	14A	18B	4A	3A	4A					R2 AUXILIARY	6	F		
18	12B			12B	14A	14A	17B	4A	4A						R2A AUXILIARY	6	F		
19	8B			14A	11B	13B	9B	18A	11B	14A					R2A	6	A		
21	12B			12B	14A	17B	17B	4A	4A	14A					R1 AUXILIARY	6	F		
22	8B			14A	12B	13B	9B	18A	11B	14A					R1	6	A		
24	16A			16A	10B	15B	10B	15B	15A	3B					CE MODE AUXILIARY	6	F		
25	16A			16A	3A	3A	8B	8A	8B	8A	8A	16A	12A	15B	CE MODE	12	C		
28	6A			6B	6A	6A	7A	8A	8A	3B					RECEIVE 3	6	G		
30	6A			6A	6A	6A	6A	7A	5A	6A					RECEIVE 2	6	G		
31B					8A	8B	8B	8B							SEL DIODE	2	D		
32	6A			6A	6A	7A	12B	6A	3B	3B					RECEIVE 1	6	G		
33	14B			10A	9A	18A	10A	10A	11B						DATA CHECK 3	6	F		
35	14B			10A	10A		4A								DATA CHECK 2	4	B		
36	14B			10A	10A	15B	16A	17B							DATA CHECK 1	4	B		
37	10B			12A	10A	9A	12A	9A	14B	11B					RESTART	6	F		
38B					8B	8A	8A	8A							SEL DIODE	2	D		
39A					9A	3B	8A	10B							SEL DIODE	2	D		
39B					4B	9B	3A	3A							SEL DIODE	2	D		
40A					12B	10B	12A	16A							ARC SUPPRESS	2	E		
40B					10A	10A		12B							ARC SUPPRESS	2	E		
41	10A			10A	13A	12A	18B	9A	17A	3B					PRINT TRANSFER 2	6	A		
42	10A			10B	17A	17A	3B	11A	9B	13B					PRINT TRANSFER 1	6	A		
44	10B			10B	3B	13A	3B	16A	12A	9A					REPLY	6	A		
45	14B			14B	17A	17A	4A	3A	3A	14B					CHARACTER	6	A		
47	12B			12B	10B	18A	18A	18A	12B	18A					POUND PRINT	6	F		
48	16B			16B	15B	15B	16A	18B	12A						CANCEL OR RELEASE STORE	6	F		
50	16B			16B	15B	3A									FORMS	4	B		
51	12A			16B	15B	16A	16B	18B							EXCEED SPEED	4	B		
52	12A			8B		7B	15B	8B							C5-AUXILIARY	4	B		
53	16A			16A	15A	15B	11A	8A	16A	13B	8A	10A	15B	12A	CANCEL	12	C		
56	16A			16A		15B	11A	7A	16A						RELEASE	6	F		
57	12B			16B		16B	16A	13B	7B						CHARACTER STORE	6	F		
59	16B			16B	17B	15B	16A	10B	12A						CANCEL OR RELEASE RESPONSE	6	F		
60	16A			16A	15B	15B	14B	12A	14A	7A	11A	12A	17B	12A	15A	16A	PROCEED	12	C
63	16A			16A	15A	15A	11A	16A							REQUEST	4	B		
64B					11A	11A	13B								SEL DIODE	2	D		
65A					16A	4B	4B	12B							SEL DIODE	2	D		
65B					3A	3A	3B	3B							SEL DIODE	2	D		
66A					13A	13A	13A	13A							SEL DIODE	2	D		
66B					16A	16A	14A								ARC SUPPRESS	2	E		
67					17A	16A		16B		16B	16B		16B		TERMINAL BLOCK 1	12			
70	6B			6B	3A	3A	3A	3A	3B	6B	6B	11A	6B	10A	13A	5B	TRANSMIT 3	12	C
73	6B			6B	3A	3A	3A	3B	3B	6B	6B	6B	10A	17A	13B				

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## RELAY POINT LOCATION CHART

CS	LTR	LOC
1	A	16B
1	B	16A
1	C	16B
1	D	16B
1	E	16B
1	F	16A
1	G	16B
1	H	16B
1	J	
1	K	
1	L	
1	M	
1	N	
1	P	
1	Q	
1	R	
2	A	10B
2	B	14B
2	C	10B
2	D	10B
2	E	9A
2	F	15A
2	G	10A
2	H	10A
2	J	16A
2	K	16A
2	L	16A
2	M	
2	N	
2	P	
2	Q	18B
2	R	18B

CS	LTR	LOC
3	A	18A
3	B	18A
3	C	18A
3	D	18A
3	E	18A
3	F	18A
3	G	18A
3	H	7A
3	J	18B
3	K	18B
3	L	7B
3	M	7B
3	N	7B
3	P	7B
3	Q	7B
3	R	7A

4	A	7A
4	B	7A
4	C	7A
4	D	7A
	E	
	F	
4	G	7A
4	H	A
4	J	18A
4	K	9A
4	L	9A
4	M	10B
4	N	7A
4	P	9B
	Q	
	R	

CS	LTR	LOC
5	A	15A
5	B	10B
	C	
	D	
5	E	9B
5	F	10B
	G	
	H	
	J	
	K	
	L	
	M	
	N	
	P	
	Q	
5	R	9B

8	A	8A
8	B	4B
8	C	5A
8	D	4B
8	E	7A
8	F	4A
8	G	7A
8	H	4A
8	J	4A
8	K	7A
8	L	4A
8	M	7A
8	N	4B
8	P	5A
8	Q	4B
8	R	8A

CS	LTR	LOC
	A	
	B	
10	C	5A
10	D	5A
10	E	5B
10	F	5B
10	G	5B
10	H	6B
	J	
10	K	6B
10	L	6A
10	M	5A
10	N	6A
	P	

# S M S CARD SOCKET LOCATIONS

# 731 I-O MAGNET - CONTACT LOCATIONS

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NAME	MAGNET	CONTACTS			
		1	2	3	4
ON/OFF		1A	1A		
R1	18A	7B		14B	14B
R2A	18A	7B		14B	14B
R2	18A	7B		13B	13B
R5	18A	7B		14B	14B
T1	18A	7A		13B	13B
T2	18A	7A		13B	13B
CHECK	18A	7A		13B	13B
TAB	18B	7A	7B	7A	
SPACE	18B	7B	7B	7A	
BACKSPACE	18A			10B	
C6 CAM			9B		
C5 CAM			9B		
C1 CAM			9B		
C2 CAM			9B		
REQUEST KEY			15A		
RELEASE KEY			15A		
CANCEL KEY			15A		
CARRIER RETURN			18B		
KEYBOARD UNLOCK			18B		

## SWITCHES

NO.	NAME	PART NO.	LOCATION
1	CHECK	121756	8A
2	T2	121756	8A
3	T1	121756	8A
4	R5	121756	8A
5	R2	121756	8B
6	R2A	121756	8B
7	R1	121756	8B
8B	C E MODE	128455	15A
9A	C E REPLY	128455	3A
9B	C E REPLY	128455	3B
10B	C E REPLY	128455	11A
10A	C E REQUEST	128455	16A
11A	DATA CHECK HOLD	128455	13A
11B	DATA CHECK HOLD	128455	15B
12A	RESET	368433	2A
12B	RESET	368433	2A
	FORMS	1128987	16B

## DISPLAY HOUSING LIGHTS

NAME	VOLTS	BULB PART NUMBER	LOCATION
REQUEST	12	719293	16A
PROCEED	12	719293	16B
EXCEED SPEED	12	719293	16B
FORMS	12	719293	16B
DATA CHECK	12	719293	16B

TB 3

NO.	LOC
4	2A
5	2B
6	2A
7	2A
9	2B
10	2B

## RELAY GATE LOCATIONS

RELAY SIDE

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## CE MODE SWITCHES

#### +48V DC POINT TO POINT WIRING

## DC COMMON POINT TO POINT WIRING

RELAY GATE COMPONENTS			
CODE	SIZE	PART NUMBER	QTY
A	6	311714	11
B	4	196208	14
C	12	255735	7
D	2	222355	17
E	2	442497	11
F	6	196198	17
G	6	311715	4
H	2	328601	1

POINT	LOC	POINT	LOC
8B SW	15A	63-1 OP	15A
10B SW	11A	70-11 OP	13A
11B SW	15B	70-10 OP	10A
12A SW	2A	70-8 OP	11A
5-5 OP	11B	73-9 OP	10A
8-5 OP	11B	79-8 OP	5B
11-5 OP	11B	79-7 OP	7B
15-5 OP	11B	85-7 OP	7B
15-2 OP	13B	85-5 OP	13A
19-5 OP	11B	85-4 OP	11A
19-2 OP	13B	93-B C	3B
22-5 OP	11B	94-5 U	5A
24-5 OP	15A		
24-2 OP	15B		
25-12 N/0	15B	100-4 OP	3B
30-5 OP	5A	100-2 OP	18B
36-2 OP	15B	101-2 OP	11B
41-6 OP	17B	100-3 OP	
		105B3 AN	
44-1 OP	9B	106-P	
50-1 OP	15B	107-4 OP	10A
51-1 OP	15B	CS04K	9A
52-2 OP	7B	CS05R	9B
53-9 OP	15B	CS08P	5A
53-8 OP	10A	CS08G	7A
53-3 OP	11A	CS08E	7A
53-2 OP	15B	CS10G	5B
56-4 OP	7A		
56-3 OP	11A		
56-2 OP	15B		
57-5 OP	7B		
60-9 N/0	17B		
60-6 OP	7A		
60-2 OP	15B		
63-3 OP	11A		

POINT	LOC	POINT	LOC	POINT	LOC
CS01F	16A	66 BC	16A	35 HC	10A
CS08N	4B	65A3CA	4B	36 PC	14B
CS08J	4A	63 HC	16A	36 HC	10A
CS08A	8A	63 PC	16A	37 PC	10B
CS10N	6A	60 HC	16A	37 HC	12A
CS10K	6B	60 PC	16A	39B1 AN	4B
TB3-7	2A	59 HC	16B	40 AC	12A
TDR PC	8B	59 PC	16B	40 BC	10A
108 HC	8B	57 HC	16B	41 PC	10A
108 PC	8B	57 PC	12B	41 HC	10A
107 HC	10A	56 HC	16A	42 PC	10A
106 HC	6B	56 PC	16A	42 HC	10B
		53 HC	16A	44 PC	10B
104 PC	12A	53 PC	16A	44 HC	10B
103 HC	12A	52 HC	8B	45-6 N/C	14B
102 HC	8B	52 PC	12A	45 HC	14B
102 PC	8B	51 HC	16B	2 HC	14A
101 HC	8B	51 PC	12A	4 PC	12B
101 PC	12A	50 HC	16B		
100 HC	18B	48 HC	16B	5 HC	14A
100 PC	18B	48 PC	16B	7 PC	12B
99-5 N/C	10A	47 HC	12B	8 PC	8A
99 HC	10A	47 PC	12B	8 HC	14A
98 HC	18B	24 HC	16A	10 HC	12B
98 PC	18B	25 HC	16A	11 PC	8A
97 BC	12B	28 PC	6B	11 HC	14A
97 AC	5A	28 HC	6B	13 AC	8A
94-12C	6B	30 PC	6A	14 BC	8B
90-3C	4B	30 HC	6B	15 PC	8B
89 BC	12A	32 PC	6A	15 HC	14A
85 HC	12A	32 HC	6A	16 HC	12B
85 PC	12A	33 PC	14B	18 HC	12B
85-10 OP	8A	33 HC	10A	19 PC	8B
83 P	4B	35 PC	14B	19 HC	14A
83 HC	12A			21 HC	12B
82 PC	6A			22 PC	8B
79 HC	6B			22 HC	14A
79 PC	4B				
77 HC	6B				
77 PC	6B				
77 AC	16B				
76 BC	12B				
76 AC	12B				
73 HC	6B				
73 PC	6B				
70 HC	6B				
70 PC	6B				
67 C	16B				

TECHNICAL SERVICES APPROVAL	STANDARD CODE	CHANGE NO.	DATE	SYM	TECH APPRO	CHANGE NO.	DATE	SYM	TECH APPRO
4-3-64	89816	1	10-10-64	ELEC	4-3-64	89816	1	ELEC	4-3-64
RELEASED FOR ASM	QTY	1	10-10-64	MET	RELEASED FOR ASM	QTY	1	PLASTIC	10-10-64
RELEASER SIGNATURE	INITIALS	1	10-10-64	FINISH	RELEASER SIGNATURE	INITIALS	1	FINISH	10-10-64
RELEASER SIGNATURE	INITIALS	1	10-10-64	PLASTIC	RELEASER SIGNATURE	INITIALS	1	PLASTIC	10-10-64

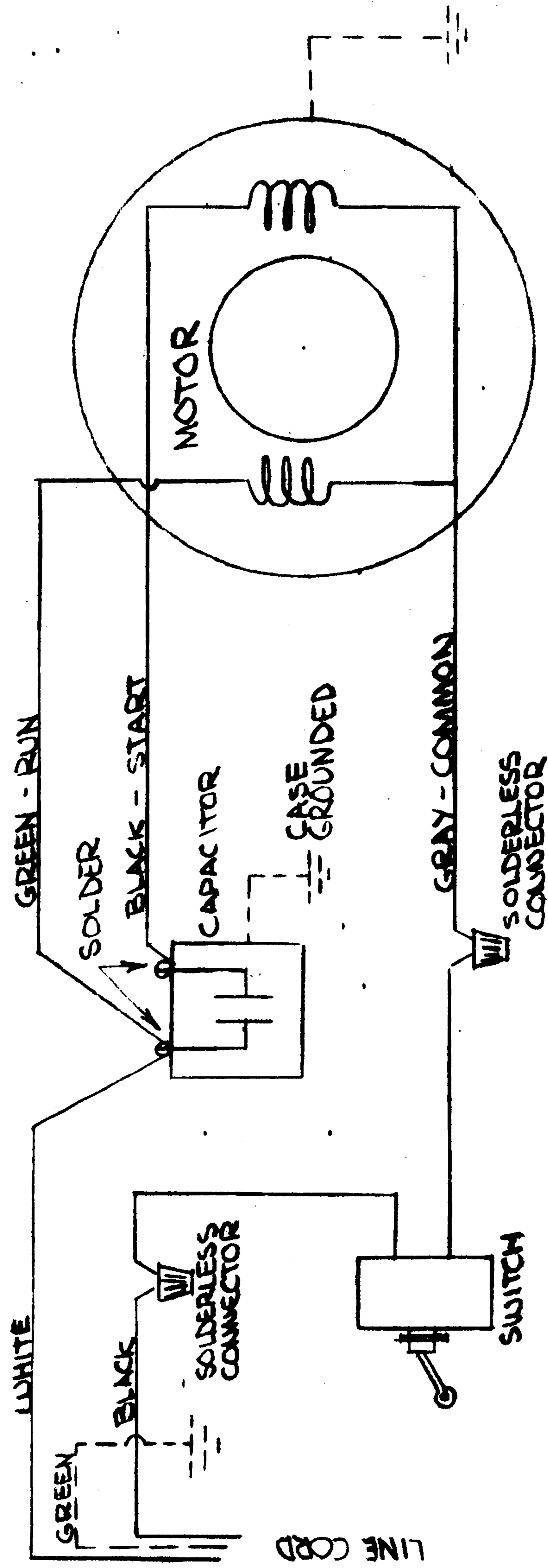
# DRAWING

# SKETCHING

# DESK

# BOARD


# ART



IBM MATERIAL NO	TOLERANCE UNLESS OTHERWISE NOTED	MUST CONFORM TO ENG SPEC 890350	INTERNATIONAL BUSINESS MACHINES CORP
2 PLACE DEC ±	ALIGNMENT WITHIN	WIRING DIAGRAM -	NAME
3 PLACE DEC ±	CONC TO DU WITHIN	CAPACITOR STAGED MOTOR	WIRING DIAGRAM -
NOTE III	FLAT WITHIN	3-31-64 TYPE	73 X
NOTE IV	SURFACE TREATMENT	3-31-64 SCALE	NON
NOTE V	CASE DEPTH	WES	NON
NOTE VI	HARDNESS	3-31-64	NON
MAX	MAX STRAIGHT WITHIN	4-1-64 DRAW	WE S
MAX	MAX SQUARE TO DU WITHIN	4-1-64 APPRO	4-3-64 CHECK PDR

732017

DATE	CHANGE NO.
II-7-62	II5180B
2-25-63	II5210



A

B

INTERNATIONAL BUSINESS MACHINES CORP				
NAME 1014 REMOTE INQUIRY				
UNIT REFERENCE				
DESIGN	RWK	7-12-62	TYPE	1014
DETAIL			SCALE	NONE
CHECK	R S	7-12-62	DRAW	
APPRO	HAR	7-12-62	CHECK	